

**REMARKS**

An Excess Claim Fee Payment Letter for three (3) additional claims is attached.

Claims 1-29 are all the claims presently pending in the application. Claims 1 and 8 have been amended to more clearly define the invention and claims 27-29 are added. Claims 1, 8, 14, 19 and 24 are independent.

These amendments are made only to more particularly point out the invention for the Examiner and not for narrowing the scope of the claims or for any reason related to a statutory requirement for patentability.

Applicant also notes that, notwithstanding any claim amendments herein or later during prosecution, Applicant's intent is to encompass equivalents of all claim elements.

Applicant gratefully acknowledges that claims 4 and 10 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicant respectfully submits that all of the claims are allowable.

This amendment also adds claims 27-29, which recite the features of allowable claim 4.

Claims 1-3 and 8-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of the Rasanen reference (USPN 6,445,924). Claims 5-6 and 11-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of the Rasanen reference, and further in view of the Chang, et al. reference (USPN 6,487,406). Claims 7 and 13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of the Rasanen reference, and further in view of the Valentine, et al. reference (USPN 6,449,478). Claims 14-16 and 24-26 stand rejected under

35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of the Rasanen reference, and further in view of the Manning, et al. reference (USPN 6,580,699). Claim 17 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of the Rasanen reference, further in view of the Manning, et al. reference, and further in view of the Chang, et al. reference. Claim 18 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of the Rasanen reference, further in view of the Manning, et al. reference, and further in view of the Valentine, et al. reference. Claims 19 and 21 stand rejected under 35 U.S.C. 102(e) as being unpatentable over the Rasanen reference, in view of the Ray, et al. reference (USPN 6,424,638). Claim 20 stands rejected under 35 U.S.C. 102(e) as being unpatentable over the Rasanen reference, in view of the Ray, et al. reference, and further in view of Applicant's admitted prior art. Claim 22 stands rejected under 35 U.S.C. 102(e) as being unpatentable over the Rasanen reference, in view of the Ray, et al. reference, and further in view of the Chang, et al. reference. Claim 23 stands rejected under 35 U.S.C. 102(e) as being unpatentable over the Rasanen reference, in view of the Ray, et al. reference, and further in view of the Valentine, et al. reference.

These rejections are respectfully traversed in the following discussion.

## I. THE CLAIMED INVENTION

A first exemplary non-limiting, embodiment of the claimed invention as defined, for example by claim 1, is directed to a mobile wireless communication system which includes an information server, a portable terminal, a plurality of wireless communication servers, a switch, and a wireless telephony server. The portable terminal communicates with the information server through a wireless communication line and has a buffer memory which

stores information transmitted from the information server. A first of the plurality of wireless communication gateway servers is selected based upon the position of the portable terminal, has a buffer emulator which stores data regarding the buffer memory in the portable terminal, and transmits information from the information server to the portable terminal based upon the data in the buffer emulator. The switch sets the connection between the portable terminal and the first wireless communication gateway server and also sets a connection between the portable terminal and a second of the plurality of wireless communication gateway servers when the first wireless communication gateway server is congested. The wireless telephony server of the first exemplary embodiment informs the plurality of wireless communication gateway servers of the position of the portable terminal.

A second exemplary, non-limiting embodiment of the present invention, as defined, for example by claim 14, is directed to a method for operating a mobile wireless communication system. The method includes storing data representing a specification of a buffer memory of a portable terminal in a buffer memory emulator of a first wireless communication gateway server when the portable terminal is connected to the first wireless communication gateway server, changing from one connection between the portable terminal and the first wireless communication gateway server to another connection between the portable terminal and a second wireless communication gateway server when the first wireless communication gateway server is congested, and transferring the specification data from the first wireless communication gateway server to the second wireless communication gateway server.

A third exemplary, non-limiting embodiment of the present invention, as defined, for example by claim 19, is directed to a method for operating a mobile wireless communication

system including changing from one connection between a portable terminal and one access point of a wireless communication gateway server to another connection between the portable terminal and another access point of the wireless communication gateway server when the wireless communication gateway server is congested. The wireless communication gateway server converts a protocol between the portable terminal and an information server on a network.

As mentioned in the previous Amendment incorporated herein by reference, these conventional systems have required the installation of a new access point into a portable terminal 20 in order to establish communication with the portable terminal 20 and an information server 26.

The present invention may reduce the amount of time required for a portable terminal to access an information server.

In the first exemplary embodiment of the present invention, as shown in Fig. 2, the wireless telephony server 8 informs a plurality of wireless communication gateway servers 5A and 5B of the position of the portable terminal 1. In this manner, the servers 5A and 5B may take various actions to reduce the amount of time required for the portable terminal 1 to access an information server 7. For example, a wireless communication gateway server 5A may request the switch 3 to change a connection with the portable terminal 1 based upon the position (page 8, lines 22-27).

In the second exemplary embodiment of the present invention, the wireless communication gateway servers may transfer specification data from a first wireless communication gateway server 5A to a second wireless communication gateway server 5B to reduce the amount of time for the portable terminal 1 to communicate with the information

server 7 should the portable terminal have a communication switched from the first wireless communication gateway server to the second wireless communication gateway server.

In the third exemplary embodiment of the present invention, if the wireless communication gateway server is congested, a connection at one access point of a wireless communication gateway server APa may be changed to another access point APb of the same wireless communication gateway apparatus. For example, the wireless communication gateway server 5A may instruct the switching apparatus 3 to carry out connection to another access point at the same wireless communication gateway server 5A.

## II. THE PRIOR ART REJECTIONS

### A. The Applicant's admitted prior art in view of the Rasanen reference

Regarding claims 1-3 and 8-9, the Examiner alleges that the Rasanen reference would have been combined with the Applicant's admitted prior art (hereinafter "AAPA") to form the claimed invention. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Applicant submits that these references would not have been combined as alleged by the Examiner. Indeed, the references are directed to completely different matters and problems.

Specifically, as explained above, the AAPA is concerned with congestion at an access point Apa in the wireless communication gateway server 24A shown in Fig. 1.

In stark contrast, the Rasanen reference is concerned with the completely different and unrelated problem of implementing handoffs between base station cells when it is necessary

to reduce the congestion of a base station cell (col. 3, line 56 - col. 4, line 10).

One of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA would not have referred to the Rasanen reference because the Rasanen reference does not mention anything at all regarding a wireless communication gateway server let alone, handling congestion at an access point of a wireless communication gateway server.

Rather, the Rasanen reference is only concerned with handling congestion that occurs in a base station cell. Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner.

The Examiner alleges that the AAPA does not mention a switching apparatus for setting another connection between the portable terminal and a second wireless communication gateway when the communication between the portable terminal and the first wireless communication gateway server congests, then alleges that the Rasanen reference discloses such a feature and finally alleges that it would have been obvious to one having ordinary skill in the art to provide the switching apparatus that is allegedly disclosed by the Rasanen reference “so that the system can reduce a time required for a portable terminal to access information server and reduce connection time.”

There are at least three things wrong with the Examiner’s proposed motivation to modify. Indeed, the Examiner continues to demonstrate confusion between a base station, a wireless communication gateway server and a switching apparatus.

Firstly, contrary to the Examiner’s allegation that the AAPA does not teach or suggest a switching apparatus, as is clearly shown in Fig 1, the AAPA already includes a switching

apparatus for setting another connection between the portable terminal and a second wireless communication gateway when the communication between the portable terminal and the first wireless communication gateway server congests.

As explained above, in the AAPA if the wireless communication gateway server 24A becomes congested, or if an access point APa on the wireless communication gateway server 24A becomes congested, the user of the portable terminal 20 is required to wait until the process for monitoring the buffer memory is initialized in another wireless communication gateway server 24B or even in the same wireless communication gateway server 24A. Therefore, a user of the portable telephone 20 has been required to wait until a new access point is installed, a connection to the new access point is established and the process for monitoring the buffer memory is initialized (page 5, line 26 - page 6, line 11). This delay not only results in a waste of time but may also impose an economic burden on the user when a communication fee is charged based upon the amount of time that the portable terminal 20 stays connected to a base station (not shown).

Therefore, contrary to the Examiner's allegation, one of ordinary skill in the art would not have been motivated to provide the AAPA with a switching apparatus because the AAPA already has a switching apparatus.

Secondly, contrary to the Examiner's allegation, the Rasanen reference does not teach or suggest a switching apparatus that sets another connection between the portable terminal and a second wireless communication gateway when the communication between the portable terminal and the first wireless communication gateway server congests.

Rather, as clearly explained in the Applicant's previous response, the Rasanen reference does not teach or suggest a wireless communication gateway server, let alone

changing connections between wireless communication gateway servers.

The Examiner again appears to confuse a base station (BTS) as shown in Fig. 1 of the Rasanen reference with the wireless communication gateway server that is disclosed by the AAPA and which is used by the present invention.

As explained by the present specification, the base station is used to establish radio communication into the system of the present invention. For example, the base station (i.e. radio antenna) has a known location and the position of the portable terminal may be reported by the base station to the switch for storage in the position information database (page 4, lines 2-13).

The Rasanen reference explains that a base station may become congested. However, this congestion is very different from the type of congestion that may be experienced by a wireless communication gateway server. For example, the congestion experienced at a base station is a result of the radio frequency allocation at the base station. In stark contrast, as explained above, the wireless communication gateway server operates on a network and converts protocols between the portable device and the information server. The wireless communication gateway server may experience congestion as a result of the bandwidth at an access point not being sufficient to handle the amount of data transfers being requested through the access point.

Clearly, as explained by the present specification, a base station is not a wireless communication gateway server.

Therefore, the Rasanen reference does not teach or suggest a switching apparatus for setting another connection between the portable terminal and a second wireless communication gateway when the communication between the portable terminal and the first

wireless communication gateway server congests.

Thirdly, the Examiner alleges that it would have been obvious to make the Examiner's alleged modification "so that the system can reduce a time required for a portable terminal to access information server (sic) and reduce connection time." However, not only does the Examiner's propose modification not provide the advantages that the Examiner alleges, but the Examiner does not cite any source for the alleged motivation from the applied references.

The Examiner has failed to provide a prima facie case of obviousness for failing to provide a source for the Examiner's alleged reason or motivation for such an alleged modification (see M.P.E.P. § 2143).

"The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure." M.P.E.P. §2143, emphasis added.

Applicant has carefully reviewed the Rasanen reference and the Rasanen reference merely discloses an invention of centrally implementing all of the functions and criteria which relate to a handover which is due to cell loading in one base station controller and that the motivation for centrally implementing these functions and criteria in a single base station controller is to reduce the signalling that is required and to facilitate introduction and maintenance of the functionality (col. 5, lines 11 - 30).

Therefore, the Rasanen reference is clearly not the source for the Examiner's alleged motivation.

Applicant has also carefully reviewed the AAPA and knows that the AAPA cannot be the source for the Examiner's alleged motivation.

However, the Examiner's alleged motivation appears to have been copied verbatim from Applicant's own disclosure at, for example, page 7, lines 11-18 which states that the Applicant's invention "can reduce a time required for a portable terminal to access information source server apparatus . . . for reducing a connection time."

Therefore, the Examiner appears to have improperly relied upon Applicant's own disclosure as the source of motivation. Thus, the Examiner has failed to provide a *prima facie* case of obviousness.

Moreover, even assuming arguendo that one of ordinary skill in the art would have been motivated to combine these references, the combination would not teach or suggest each and every element of the claimed invention.

As explained above, contrary to the Examiner's allegations, the AAPA does not teach or suggest a wireless telephony server for informing the position of the portable terminal to the plurality of wireless communication gateway servers.

The Examiner appears to confuse the position information database 23 shown in Fig. 1 with a wireless telephony server which is illustrated, for example, in Fig. 2 along with the position information database 4.

As clearly explained in the AAPA at page, 4, line 2 - page 5, line 3, if the portable terminal 20 determines that the area number in the portable terminal 20 does not coincide with the area number reported by a base station (not shown), the portable terminal 20 sends a position register signal through the base station to the switching apparatus 22 and the switching apparatus 22 converts the position register signal into position information that is registered in the position information database 23 and when the portable telephone 20 is first turned on, the portable telephone 20 reports its position to the switching apparatus (through

the nearest base station) and the position information is stored in the position information terminal 23.

The AAPA does not teach or suggest that the position information database 23 is for informing the position of the portable terminal to the plurality of wireless communication gateway servers. Indeed, the AAPA does not teach or suggest any communication at all between the position information database 23 and the wireless communication gateway server 24A or 24B, let alone that the position information database informs the position of the portable terminal to the plurality of wireless communication gateway servers.

Therefore, the Examiner is respectfully requested to withdraw the rejection of claims 1-3 and 8-9.

**B. The Applicant's admitted prior art in view of the Rasanen reference and in further view of the Chang et al. reference.**

Regarding claims 5-6, and 11-12, the Examiner alleges that the Rasanen reference would have been combined with the AAPA and further that the Chang et al. reference would have been combined with the combination of the AAPA and the Rasanen reference to form the claimed invention. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Applicant submits that these references would not have been combined as alleged by the Examiner. Indeed, the references are directed to completely different matters and problems.

As explained above, one of ordinary skill in the art who was concerned with

congestion at an access point in a wireless communication gateway server as disclosed by the AAPA would not have referred to the Rasanen reference because the Rasanen reference does not mention anything at all regarding a wireless communication gateway server let alone, handling congestion at an access point of a wireless communication gateway server. Rather, the Rasanen reference is only concerned with handling congestion that occurs in a base station cell.

In stark contrast to the AAPA and the Rasanen reference, the Chang et al. reference is directed to the completely different and unrelated problem of temporary Internet address assignment (col. 1, lines 47-67) and the use of specialized network protocols for packet-based wireless access techniques (col. 2, lines 1-19).

One of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA or handling congestion that occurs in a base station cell as disclosed by the Rasanen reference would not have referred to the Chang et al. reference because the Chang et al. reference is directed to the completely different and unrelated problem of temporary Internet address assignment and the use of specialized network protocols for packet-based wireless access techniques. Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner.

The Examiner admits that the neither of the AAPA and the Rasanen reference teaches or suggests a network connected to the first and second wireless communication gateway servers, the switching apparatus and the wireless telephony server so that they can all communicate with each other. The Examiner then alleges that the Chang et al. reference

remedies this deficiency of the AAPA and Rasanen reference.

However, not only does the Chang et al. reference not remedy the deficiencies discussed above regarding claims 1 and 8, the Chang et al. reference does not teach or suggest the claimed network.

The Chang et al. reference discloses a mobile IP interconnectivity architecture in Figs. 2 and 3. The architecture includes a switching apparatus (MSC 12), a gateway router 32, base stations 16, base station controllers 14 and mobility agents 42 (col. 3, line 60 - col. 4, line 19). However, the Chang et al. reference does not teach or suggest a network that allows these items to communicate.

Indeed, the Chang et al. reference specifically teaches that the base station controller 14 segregates voice traffic from data traffic. Therefore, there is clearly no connection between the switching apparatus (MSC 12) and the other components.

Further, the Chang et al. reference does not remedy the deficiencies of the AAPA and the Rasanen reference because the Chang et al. reference also does not teach or suggest a wireless telephony server for informing the position of the portable terminal to the plurality of wireless communication gateway servers.

Therefore, the Examiner is respectfully requested to withdraw the rejection of claims 5-6, and 11-12.

**C. The Applicant's admitted prior art in view of the Rasanen reference and in further view of the Valentine et al. reference**

Regarding claims 7 and 13, the Examiner alleges that the Rasanen reference would have been combined with the AAPA and further that the Valentine et al. reference would

have been combined with the combination of the AAPA and the Rasanen reference to form the claimed invention. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Applicant submits that these references would not have been combined as alleged by the Examiner. Indeed, the references are directed to completely different matters and problems.

As explained above, one of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA or handling congestion that occurs in a base station cell as disclosed by the Rasanen reference would not have referred to the Valentine et al. reference because the Valentine et al. reference is directed to the completely different and unrelated problem of handling inaccurate satellite hop delay for determining how to route a call from a satellite which receives a communication directly from a satellite phone.

Indeed, neither the AAPA nor the Rasanen reference have anything to do with a satellite based mobile phone system.

Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, the Examiner does not even support the combination by identifying a reason for combining the references.

Rather, the Examiner merely alleges that it would have been obvious to modify the combination of reference based upon the teaching of the Valentine et al. reference "so that the satellite network can be used with the mobile wireless network" (emphasis added). Applicant

respectfully submits that the mere allegation that something can be used with something else does not provide any motivation for making such a modification.

Indeed, the M.P.E.P. specifically prohibits any obviousness rejection which is based merely upon the fact that the modification is possible.

**"FACT THAT REFERENCES CAN BE COMBINED OR  
MODIFIED IS NOT SUFFICIENT TO ESTABLISH *PRIMA FACIE*  
OBVIOUSNESS"**

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." (M.P.E.P. §2143.01, Emphasis Original) Therefore, the Examiner's rejection is *prima facie* improper on its face. Thus, the Examiner is respectfully requested to withdraw the rejection of claims 7 and

13.

**D. The Applicant's admitted prior art in view of the Rasinen reference and  
in further view of the Manning et al. reference**

Regarding claims 14-16, and 24-26, the Examiner alleges that the Rasinen reference would have been combined with the AAPA and further alleges that the Manning et al. reference would have been combined with a combination of the AAPA and the Rasinen reference to form the claimed invention. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Applicant submits that these references would not have been combined as alleged by

the Examiner. Indeed, the references are directed to completely different matters and problems.

As explained above, one of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA would not have referred to the Rasanen reference because the Rasanen reference does not mention anything at all regarding a wireless communication gateway server let alone, handling congestion at an access point of a wireless communication gateway server. Rather, the Rasanen reference is only concerned with handling congestion that occurs in a base station cell.

In stark contrast to the AAPA and the Rasanen reference, the Manning et al. reference is directed to the completely different and unrelated problem of timely switching, or updating a radio network to packet data serving node connection when a mobile station roams into a new radio network (col. 1, lines 11 - 61).

One of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA or handling congestion that occurs in a base station cell as disclosed by the Rasanen reference would not have referred to the Manning et al. reference because the Manning et al. reference is directed to the completely different and unrelated problem of timely switching, or updating a radio network to packet data serving node connection when a mobile station roams into a new radio network.

Thus, the references would not have been combined, absent hindsight.

As explained above, contrary to the Examiner's allegations, not only does the Rasanen reference not teach or suggest a wireless communication gateway server, let alone teach or

suggest changing connections between a portable terminal and wireless communication gateway servers, but the Examiner has not provided a motivation for making the Examiners alleged modification. Thus, the Examiner's allegation that one of ordinary skill in the art would have modified the AAPA based upon the teachings of the Rasanen reference is prima facie improper.

Moreover, the Manning et al. does not remedy the deficiencies of the AAPA and the Rasanen reference.

The Manning et al. reference does not teach or suggest the features of independent claims 14 and 24 including: 1) transferring specification data that represents a specification of a buffer memory; and 2) changing connections between wireless communication gateway servers because of congestion.

Indeed, contrary to the Examiner's allegations, the Manning et al. reference does not having anything to do with a wireless communication gateway server, let alone changing connections between them or changing connections because of congestion.

Rather, the Manning et al. reference is concerned with maintaining, establishing or updating a radio network to packet data serving node connection when a mobile station roams into a new radio network. The Manning et al. reference explains that a visitor location register/mobile service center (VLR/MSC) stores packet data call status information that includes point to point protocol (PPP) session status information and configuration information about the base station controller which may include related cells and packet data service nodes (col. 2, lines 1-14). That packet data call status information may be maintained, updated or transferred to another VLR/MSC when the mobile station roams into a new cell (col. 2, lines 15 - 54).

This packet data call status information does not include a specification of a buffer memory. Therefore, contrary to the Examiner's allegation, the Manning et al. reference does not teach or suggest transferring a specification that includes a specification of a buffer memory.

The Examiner cites col. 10, lines 17-26 of the Manning et al. reference in an attempt to provide support for the Examiner's allegation that the Manning et al. reference discloses transferring a specification of a buffer memory between wireless communication gateway servers. However, the Examiner's citation of the Manning et al. reference only discloses transferring information about a base station controller and packet data, as explained above.

Even assuming arguendo that the Manning et al. reference discloses the features that the Examiner alleges, one of ordinary skill in the art would not have been motivated to modify a combination of the AAPA and the Rasanen reference.

The Examiner alleges that it would have been obvious to provide the teaching of the Manning et al. reference to the combination "so that the system can track roaming of mobile unit (sic) that helps for billing." However, not only does the Examiner's propose modification not provide the advantages that the Examiner is alleging provides a motivation to make the Examiner's propose modification, but the Examiner does not cite any source for the alleged motivation from the applied references.

The Examiner has failed to provide a prima facie case of obviousness for failing to provide a source for the Examiner's alleged reason or motivation for such an alleged modification (see M.P.E.P. § 2143).

"The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in

applicant's disclosure." M.P.E.P. §2143, emphasis added.

Applicant has carefully reviewed the Manning et al. reference for a disclosure of the Examiner's alleged motivation. However, the Manning et al. reference does not mention tracking roaming of a mobile unit to help billing. Indeed, the Mannig et al. reference does not mention anything at all even remotely related to billing.

Further, the Examiner does not explain how merely tracking the roaming of a mobile unit can help billing.

While, the AAPA appears to disclose how the cost of a call may be affected by transfers between wireless communication gateway servers. The AAPA does not mention anything at all about how these transfers may "help for billing."

Lastly, the none of the applied references teach or suggest how the transfer of packet data call status information between VSR/MSCs as disclosed by the Manning et al. reference allows the system to "track roaming of a mobile unit that helps for billing."

Thus, the Examiner has failed to provide a *prima facie* case of obviousness.

Therefore, the Examiner is respectfully requested to withdraw the rejection of claims 14-16, and 24-26.

**E. The Applicant's admitted prior art in view of the Rasanen reference and in further view of the Manning et al. reference and still further in view of the Chang et al. reference**

Regarding claim 17, the Examiner alleges that the Rasanen reference would have been combined with the AAPA, that the Manning et al. reference would have been combined with a combination of the AAPA and the Rasanen reference, and further alleges that the Chang et

al. reference would have been combined with the AAPA, the Rasanen reference and the Manning et al. reference to form the claimed invention. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Applicant submits that these references would not have been combined as alleged by the Examiner. Indeed, the references are directed to completely different matters and problems.

As explained above, one of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA would not have referred to the Rasanen reference because the Rasanen reference does not mention anything at all regarding a wireless communication gateway server let alone, handling congestion at an access point of a wireless communication gateway server. Rather, the Rasanen reference is only concerned with handling congestion that occurs in a base station cell.

In stark contrast to the AAPA and the Rasanen reference, the Manning et al. reference is directed to the completely different and unrelated problem of timely switching, or updating a radio network to packet data serving node connection when a mobile station roams into a new radio network (col. 1, lines 11 - 61).

One of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA or handling congestion that occurs in a base station cell as disclosed by the Rasanen reference would not have referred to the Manning et al. reference because the Manning et al. reference is directed to the completely different and unrelated problem of timely switching, or updating a radio

network to packet data serving node connection when a mobile station roams into a new radio network.

In stark contrast to the AAPA, the Rasanen reference and the Manning et al. reference, the Chang et al. reference is directed to the completely different and unrelated problem of temporary Internet address assignment (col. 1, lines 47-67) and the use of specialized network protocols for packet-based wireless access techniques (col. 2, lines 1-19).

One of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA, handling congestion that occurs in a base station cell as disclosed by the Rasanen reference, or timely switching, or updating a radio network to packet data serving node connection when a mobile station roams into a new radio network as disclosed by the Manning et al. reference would not have referred to the Chang et al. reference because the Chang et al. reference is directed to the completely different and unrelated problem of temporary Internet address assignment and the use of specialized network protocols for packet-based wireless access techniques.

Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner.

The Examiner admits that none the AAPA, the Rasanen reference and the Manning et al. references do not teach or suggests the Internet connected to the first and second wireless communication gateway servers, the switching apparatus and the wireless telephony server so that they can all communicate with each other. The Examiner then alleges that the Chang et al. reference remedies this deficiency of the AAPA, the Rasanen reference and the Manning et al. reference.

However, not only does the Chang et al. reference not remedy the deficiencies discussed above regarding claims 1 and 8, the Chang et al. reference does not teach or suggest the claimed Internet connections.

The Chang et al. reference discloses a mobile IP interconnectivity architecture in Figs. 2 and 3. The architecture includes a switching apparatus (MSC 12), a gateway router 32, base stations 16, base station controllers 14 and mobility agents 42 (col. 3, line 60 - col. 4, line 19). However, the Chang et al. reference does not teach or suggest connections between these elements via the Internet to allow these items to communicate.

Indeed, the Chang et al. reference specifically teaches that the base station controller 14 segregates voice traffic from data traffic. Therefore, there is clearly no connection between the switching apparatus (MSC 12) and the other components, let alone a connection between the elements via the Internet.

Further, the Chang et al. reference does not remedy the deficiencies of the AAPA and the Rasanen reference because the Chang et al. reference also does not teach or suggest a wireless telephony server for informing the position of the portable terminal to the plurality of wireless communication gateway servers.

Therefore, the Examiner is respectfully requested to withdraw the rejection of claim 17.

**F. The Applicant's admitted prior art in view of the Rasanen reference in further view of the Manning et al. reference and still further in view of the Valentine et al. reference**

Regarding claim 18, the Examiner alleges that the Rasanen reference would have been

combined with the AAPA, that the Manning et al. reference would have been combined with a combination of the AAPA and the Rasanen reference, and further alleges that the Valentine et al. reference would have been combined with the AAPA, the Rasanen reference and the Manning et al. reference to form the claimed invention. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Applicant submits that these references would not have been combined as alleged by the Examiner. Indeed, the references are directed to completely different matters and problems.

As explained above, one of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA would not have referred to the Rasanen reference because the Rasanen reference does not mention anything at all regarding a wireless communication gateway server let alone, handling congestion at an access point of a wireless communication gateway server. Rather, the Rasanen reference is only concerned with handling congestion that occurs in a base station cell.

In stark contrast to the AAPA and the Rasanen reference, the Manning et al. reference is directed to the completely different and unrelated problem of timely switching, or updating a radio network to packet data serving node connection when a mobile station roams into a new radio network (col. 1, lines 11 - 61).

One of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA or handling congestion that occurs in a base station cell as disclosed by the Rasanen reference would not

have referred to the Manning et al. reference because the Manning et al. reference is directed to the completely different and unrelated problem of timely switching, or updating a radio network to packet data serving node connection when a mobile station roams into a new radio network.

In stark contrast to the AAPA, the Rasanen reference and the Manning et al. reference, the Valentine et al. reference is directed to the completely different and unrelated problem of handling inaccurate satellite hop delay for determining how to route a call from a satellite which receives a communication directly from a satellite phone (col. 2, line 42 - col. 3, line 30) by providing a satellite hop counter which includes three fields, one for each type of delay (col. 3, lines 32-43).

One of ordinary skill in the art who was concerned with congestion at an access point in a wireless communication gateway server as disclosed by the AAPA, handling congestion that occurs in a base station cell as disclosed by the Rasanen reference, or timely switching, or updating a radio network to packet data serving node connection when a mobile station roams into a new radio network as disclosed by the Manning et al. reference would not have referred to the Valentine et al. reference because the Valentine et al. reference is directed to the completely different and unrelated problem of handling inaccurate satellite hop delay for determining how to route a call from a satellite.

Indeed, none of the AAPA, the Rasanen reference or the Manning et al. reference having anything at all to do with satellite based mobile telephones.

Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, the Examiner

does not even support the combination by identifying a reason for combining the references.

Rather, the Examiner again merely alleges that it would have been obvious to modify the combination of reference based upon the teaching of the Valentine et al. reference “so that the satellite network can be used with the mobile wireless network” (emphasis added). As explained above, in reference to the rejection of claims 7 and 13, the mere allegation that something can be used with something else does not provide any motivation for making such a modification.

Therefore, the Examiner’s rejection is prima facie improper on its face.

Thus, the Examiner is respectfully requested to withdraw the rejection of claim 18.

#### **G. The Rasanen reference in view of the Ray et al. reference**

Regarding claims 19 and 21, Applicant notes that the Examiner has cited 35 U.S.C. § 102(e) as the basis for this rejection. Clearly, the basis for this rejection is improper as the Examiner admits that neither of the Rasanen reference nor the Ray et al. reference teaches the features of claims 19 and 21

Indeed, the Examiner alleges that both of these references are required in order to find a disclosure of the features recited by claims 19 and 21. Therefore, under the Examiner’s own admission, neither of these references anticipate claims 19 and 21.

Thus, Applicant respectfully requests withdrawal of the rejection of claims 19 and 21.

In order to prevent the Examiner from alleging in the next Office Action, that it would have been obvious to combine these references, Applicant has carefully reviewed the Rasanen reference and the Ray et al. reference to determine whether it would have been obvious to combine these references to form the claimed invention. Applicant submits that these

references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention

Applicant submits that these references would not have been combined. Indeed, the references are directed to completely different matters and problems.

Specifically, as explained above, the Rasanen reference is concerned with the problem of implementing handoffs between base station cells when it is necessary to reduce the congestion of a base station cell (col. 3, line 56 - col. 4, line 10).

In stark contrast, the Ray et al. reference is concerned with the completely different and unrelated problem of enabling handovers between wireless telephone systems that operate using different protocols (col. 1, lines 38-57).

One of ordinary skill in the art who was concerned with implementing handoffs between base station cells when it is necessary to reduce the congestion of a base station cell as disclosed by the Rasanen reference would not have referred to the Ray et al. reference because the Ray et al. reference does not mention anything at all regarding a wireless communication gateway server let alone, handling congestion at an access point of a wireless communication gateway server. Indeed, the Rasanen reference does not teach or suggest anything at all regarding wireless systems that operate using different protocols, let alone handing off between such wireless systems.

Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner.

Contrary to the Examiner's allegation, the Rasanen reference does not teach or suggest a changing connections between the portable terminal and an access point of a

wireless communication gateway when the wireless communication gateway server congests.

Rather, as clearly explained above in reference to the rejection of claims 1-3 and 8-9 and in the Applicant's previous response, the Rasanen reference does not teach or suggest a wireless communication gateway server, let alone changing connections between access points of a wireless communication gateway servers.

Clearly, a base station is not a wireless communication gateway server.

Therefore, the Rasanen reference does not teach or suggest changing from one connection between a portable terminal and one access point of a wireless communication gateway server to another connection between the portable terminal and another access point of the wireless communication gateway server when the wireless communication gateway server congests.

Further, contrary to the Examiner's allegations, the Ray et al. reference does not teach or suggest a wireless communication gateway server that converts a protocol between the portable terminal and an information server on a network.

As clearly explained by the present specification and shown, for example, in Fig. 1, the wireless communication gateway server converts a wireless application protocol and an Internet protocol (page 2, line 5 - page 3, line 6).

In stark contrast, the Ray et al. reference discloses a conversion device such as a Roam-Free Gateway that converts between wireless application protocols to enable different wireless systems that use different wireless application protocols to perform call handovers between the different wireless systems (col. 1, lines 38-57). Therefore, contrary to the Examiner's allegations, the Ray et al. reference does not teach or suggest a wireless communication gateway server that converts a protocol between the portable terminal and an

information server on a network.

Therefore, the Examiner cannot allege that it would have been obvious to combine the Ray et al. reference with the Rasanen reference to form the claimed invention.

**H. The Rasanen reference in view of the Ray et al. reference and in further view of the Applicant's admitted prior art**

Regarding claim 20, Applicant notes that the Examiner has cited 35 U.S.C. § 102(e) as the basis for this rejection. Clearly, the basis for this rejection is improper as the Examiner admits that neither of the Rasanen reference, the Ray et al. reference, nor the AAPA teaches the features of claim 20.

Indeed, the Examiner alleges that all of these references are required in order to find a disclosure of the features recited by claim 20. Therefore, under the Examiner's own admission, none of these references anticipate claim 20.

Thus, Applicant respectfully requests withdrawal of the rejection of claim 20.

In order to prevent the Examiner from alleging in the next Office Action, that it would have been obvious to combine these references, Applicant has carefully reviewed the Rasanen reference, the Ray et al. reference and the AAPA to determine whether it would have been obvious to combine these references to form the claimed invention.

Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

As explained above, one of ordinary skill in the art who was concerned with implementing handoffs between base station cells when it is necessary to reduce the

congestion of a base station cell as disclosed by the Rasanen reference would not have referred to the Ray et al. reference because the Ray et al. reference is only concerned with the completely different and unrelated problem of enabling handovers between wireless telephone systems that operate using different protocols.

Indeed, the Rasanen reference does not teach or suggest anything at all regarding wireless systems that operate using different protocols, let alone handing off between such wireless systems.

In stark contrast to the Rasanen reference and the Ray et al. reference, the AAPA is directed to the completely different and unrelated problem of congestion at an access point in a wireless communication gateway server.

Therefore, one of ordinary skill in the art who was concerned with implementing handoffs between base station cells when it is necessary to reduce the congestion of a base station cell as disclosed by the Rasanen reference or enabling handovers between wireless telephone systems that operate using different protocols as disclosed by the Ray et al. reference would not have referred to the AAPA because the AAPA is directed to the completely different and unrelated problem of congestion at an access point in a wireless communication gateway server.

Indeed, neither of the Rasanen or Ray et al. references teaches or suggests anything at all even remotely related to wireless communication gateway servers, let alone congestion at an access point in a wireless communication gateway server.

Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, the Examiner

does not even support the combination by identifying a reason for combining the references.

The Examiner alleges that it would have been obvious to modify the Examiner's alleged combination of the Rasanen reference and the Ray et al. reference based upon the AAPA to inform a position of the portable terminal from a wireless telephony server to a wireless gateway server "so that the system can provide information to user (sic) when user (sic) is out of the home service provider."

There are at least two things wrong with the Examiner's allegation.

First, the AAPA does not teach or suggest a wireless telephony server. Neither do either of the Rasanen et al. and Ray et al. references. Therefore, the Examiner's alleged combination is prima facie insufficient for failing to disclose all of the claimed features.

Secondly, only the Ray et al. reference teaches or suggests anything at all that will allow a system to "provide information to user (sic) when user (sic) is out of the home service provider." The Ray et al. reference discloses a roam-free gateway that converts wireless application protocols from two different wireless systems so that calls may be handed off between the two systems. Therefore, since the Examiner's alleged combination of the Rasanen reference and the Ray et al. reference does not require modification in order to "provide information to user (sic) when user (sic) is out of the home service provider" there is no motivation to modify these references to provide this capability.

Moreover, even assuming arguendo that one of ordinary skill in the art would have been motivated to combine these references, the combination would not teach or suggest each and every element of the claimed invention.

As explained previously regarding claim 19, contrary to the Examiner's allegation, the Rasanen reference does not teach or suggest a changing connections between the portable

terminal and an access point of a wireless communication gateway when the wireless communication gateway server congests and the Ray et al. reference does not teach or suggest a wireless communication gateway server that converts a protocol between the portable terminal and an information server on a network.

Further, contrary to the Examiner's allegations, the AAPA does not teach or suggest a wireless telephony server, let alone informing a position of the portable terminal from a wireless telephony server to a wireless communication gateway server.

The Examiner cites pages 4 and 5 and Fig. 1 of the AAPA in an attempt to support the Examiner's allegation that the AAPA discloses informing a position of the portable terminal from a wireless telephony server to a wireless communication gateway server. However, none of pages 4 and 5 and Fig. 1, disclose a wireless telephony server. Rather, the wireless telephony server is not introduced in the specification until Fig. 2 and page 7, line 23.

Therefore, the Examiner cannot allege that it would have been obvious to combine the Ray et al. reference, the Rasanen reference and the AAPA to form the claimed invention.

**I. The Rasanen reference in view of the Ray et al. reference and in further view of the Chang et al. reference**

Regarding claim 22, Applicant notes that the Examiner has cited 35 U.S.C. § 102(e) as the basis for this rejection. Clearly, the basis for this rejection is improper as the Examiner admits that neither of the Rasanen reference, the Ray et al. reference, nor the Chang et al. reference teaches the features of claim 22.

Indeed, the Examiner alleges that all of these references are required in order to find a disclosure of the features recited by claim 22. Therefore, under the Examiner's own

admission, none of these references anticipate claim 22.

Thus, Applicant respectfully requests withdrawal of the rejection of claim 22.

In order to prevent the Examiner from alleging in the next Office Action, that it would have been obvious to combine these references, Applicant has carefully reviewed the Rasanen reference, the Ray et al. reference and the Chang et al. reference to determine whether it would have been obvious to combine these references to form the claimed invention.

Applicant submits that these references would not have been combined as alleged by the Examiner. Indeed, the references are directed to completely different matters and problems.

As explained above, regarding claims 19 and 21, one of ordinary skill in the art who was concerned with implementing handoffs between base station cells when it is necessary to reduce the congestion of a base station cell as disclosed by the Rasanen reference would not have referred to the Ray et al. reference because the Ray et al. reference does not mention anything at all regarding a wireless communication gateway server let alone, handling congestion at an access point of a wireless communication gateway server. Rather, the Ray et al. reference is only concerned with the completely different and unrelated problem of enabling handovers between wireless telephone systems that operate using different protocols.

Indeed, the Rasanen reference does not teach or suggest anything at all regarding wireless systems that operate using different protocols, let alone handing off between such wireless systems.

In stark contrast with the Rasanen reference and the Ray et al. reference, the Chang et al. reference is directed to the completely different and unrelated problem of temporary

Internet address assignment (col. 1, lines 47-67) and the use of specialized network protocols for packet-based wireless access techniques (col. 2, lines 1-19).

One of ordinary skill in the art who was concerned with implementing handoffs between base station cells when it is necessary to reduce the congestion of a base station cell as disclosed by the Rasanen reference or enabling handovers between wireless telephone systems that operate using different protocols as disclosed by the Ray et al. reference would not have referred to the Chang et al. reference because the Chang et al. reference is directed to the completely different and unrelated problem of temporary Internet address assignment and the use of specialized network protocols for packet-based wireless access techniques.

Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, the Examiner does not even support the combination by identifying a reason for combining the references.

The Examiner alleges that it would have been obvious to provide the network disclosed by the Chang et al. reference to the combination of the Rasanen reference and the Ray et al. reference “so that user (sic) can access internet (sic) via mobile wireless network (sic).”

There are at least two things wrong with the Examiner’s allegation.

Firstly, as explained above, the Chang et al. does not teach or suggest a wireless gateway server or a wireless telephony server, let alone a network that allows a wireless gateway server, a switching apparatus and a wireless telephony server to communicate.

Rather, as explained above, the Chang et al. reference discloses a mobile IP interconnectivity architecture in Figs. 2 and 3. The architecture includes a switching

apparatus (MSC 12), a gateway router 32, base stations 16, base station controllers 14 and mobility agents 42 (col. 3, line 60 - col. 4, line 19). However, the Chang et al. reference does not teach or suggest a network that allows these items to communicate. Indeed, the Chang et al. reference specifically teaches that the base station controller 14 segregates voice traffic from data traffic. Therefore, there is clearly no connection between the switching apparatus (MSC 12) and the other components.

Secondly, while the Chang et al. reference does appear to disclose allowing a user to access the Internet using a mobile wireless network. None of the applied references teach or suggest that a network that allows communication between a wireless communication gateway server, a wireless telephony server and a switching apparatus enables a user to access the Internet.

Rather, as explained by the AAPA, the user is already able to access the Internet using a mobile wireless network. However, an exemplary embodiment of the present invention provides a network that allows communication between a wireless communication gateway server, a wireless telephony server and a switching apparatus in order to reduce the time required to connect and/or re-connect the user to the Internet should the wireless gateway server become congested.

Therefore, the Examiner cannot allege that it would have been obvious to combine the Ray et al. reference, the Rasanen reference and the Chang et al. reference to form the claimed invention.

**J. The Rasanen reference in view of the Ray et al. reference and in further view of the Valentine et al. reference**

Regarding claim 23, Applicant notes that the Examiner has cited 35 U.S.C. § 102(e) as the basis for this rejection. Clearly, the basis for this rejection is improper as the Examiner admits that none of the Rasanen reference, the Ray et al. reference, nor the Valentine et al. reference teaches the features of claim 23.

Indeed, the Examiner alleges that all of these references are required in order to find a disclosure of the features recited by claim 23. Therefore, under the Examiner's own admission, none of these references anticipate claim 23.

Thus, Applicant respectfully requests withdrawal of the rejection of claim 23.

In order to prevent the Examiner from alleging in the next Office Action, that it would have been obvious to combine these references, Applicant has carefully reviewed the Rasanen reference, the Ray et al. reference and the Valentine et al. reference to determine whether it would have been obvious to combine these references to form the claimed invention.

Applicant submits that these references would not have been combined as alleged by the Examiner. Indeed, the references are directed to completely different matters and problems.

As explained above, regarding claims 19 and 21, one of ordinary skill in the art who was concerned with implementing handoffs between base station cells when it is necessary to reduce the congestion of a base station cell as disclosed by the Rasanen reference would not have referred to the Ray et al. reference because the Ray et al. reference does not mention anything at all regarding a wireless communication gateway server let alone, handling congestion at an access point of a wireless communication gateway server. Rather, the Ray et

al. reference is only concerned with the completely different and unrelated problem of enabling handovers between wireless telephone systems that operate using different protocols.

Indeed, the Rasanen reference does not teach or suggest anything at all regarding wireless systems that operate using different protocols, let alone handing off between such wireless systems.

In stark contrast with the Rasanen reference and the Ray et al. reference, the Valentine et al. reference is directed to the completely different and unrelated problem of handling inaccurate satellite hop delay for determining how to route a call from a satellite which receives a communication directly from a satellite phone (col. 2, line 42 - col. 3, line 30) by providing a satellite hop counter which includes three fields, one for each type of delay (col. 3, lines 32-43).

One of ordinary skill in the art who was concerned with implementing handoffs between base station cells when it is necessary to reduce the congestion of a base station cell as disclosed by the Rasanen reference or enabling handovers between wireless telephone systems that operate using different protocols as disclosed by the Ray et al. reference would not have referred to the Valentine et al. reference because the Valentine et al. reference is directed to the completely different and unrelated problem of handling inaccurate satellite hop delay for determining how to route a call from a satellite.

Indeed, neither of the Rasanen reference and the Ray et al. reference have anything at all to do with a satellite based mobile telephone system.

Thus, the references would not have been combined, absent hindsight.

Further, Applicant submits that the Examiner can point to no motivation or suggestion

in the references to urge the combination as alleged by the Examiner. Indeed, the Examiner does not even support the combination by identifying a reason for combining the references.

Rather, the Examiner merely alleges that it would have been obvious to modify the combination of reference based upon the teaching of the Valentine et al. reference "so that the satellite network can be used with the mobile wireless network" (emphasis added).

However, as explained above and clearly prohibited by the M.P.E.P., the mere allegation that something can be used with something else does not provide any motivation for making such a modification.

Therefore, the Examiner cannot allege that it would have been obvious to combine the Ray et al. reference, the Rasanen reference and the Chang et al. reference to form the claimed invention.

### **III. FORMAL MATTERS AND CONCLUSION**

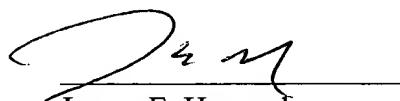
In view of the foregoing amendments and remarks, Applicant respectfully submits that claims 1-29, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 1/22/07

  
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